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A DISPOSABLE HYDROGEN FUEL SOURCE

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ABSTRACT OF THE DISCLOSURE

4       A disposable hydrogen fuel source includes first and second  
5       chambers, a hydrogen-containing material disposed in the first  
6       chamber and a reactant disposed in the second chamber, the  
7       reactant being adapted to react with the hydrogen-containing  
8       material to cause release of hydrogen. A discharge conduit  
9       extends from the first chamber for release of hydrogen therefrom.  
10      A transfer conduit interconnects the first and second chambers for  
11      flowing the reactant from the second chamber to the first chamber,  
12      and a check valve is mounted on the transfer conduit and is  
13      adapted to open upon decrease in pressure in the first chamber  
14      from a selected pressure and is adapted to close upon the pressure  
15      in the first chamber rising to the selected pressure. A  
16      pressurizer acts upon the reactant in the second chamber to  
17      maintain the reactant at the selected pressure. Upon opening of  
18      the check valve, the reactant in the second chamber is urged by  
19      the pressurizer to flow through the transfer conduit into the  
20      first chamber to react with the hydrogen-containing material to  
21      release hydrogen until the selected pressure in the first chamber  
22      is restored, thereby to close the check valve and to stop the flow  
23      of reactant material into the first chamber.